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Pacific West Region
Cultural Resources

Museum Management Plan

Haleakalā National Park

Haleakalā National Park
Museum Management Planning Team

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Department of the Interior
National Park Service
Pacific West Region

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Museum Management Plan

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Executive Summary

The *Haleakalā National Park Museum Management Plan* outlines a series of issues concerning the management and use of museum collections, and recommends corresponding actions necessary to address those issues. The park is currently holding 4,009 museum objects and specimens (2002 Collections Management Report). With approximately 227,500 additional individual items to be added to the park archives and museum collections. The total collections at this time are estimated to contain 231,509 items. This is a large and multi-faceted collection with complex documentation and preservation needs, and its management clearly is beyond what is normally expected of a collateral duty assignment.

The Cultural Resources Management (CRM) Program is part of the Resource Management Division at Haleakalā National Park. Established October 1, 2000, the program is very much in a developmental stage. The current CRM Program Manager is an archeologist, whose staff time is spent mostly on other CRM activities and compliance actions. For the last two years the Museum Management Program has had the services of two individuals on a collateral duty basis; neither has had formal archival or museum management training. Currently there are no permanent, full time positions or National Park Service funding to support the park Museum Management Program.

As a result, the Museum Management Program is lacking just about everything needed to make it a functioning and productive branch that proactively serves park needs.

Key Recommendations

- Develop role and function statements to define the archival and museum collection resources for the park as a whole.
- Develop and implement protocols necessary to direct growth of the archival and museum collections in order to provide quality information for future use.
- Provide journeyman level staff to manage these park-specific resources to professional standards.
- Provide the work, storage, and study areas necessary to house the park archives and collections, and make these resources available to park staff and accredited public users.
- Promote access to and proper use of park archives and collections, using methods that provide protection for the resource, and are safe for the user.

These are the key recommendations of the planning team. Each major section contains detailed recommendations the park may wish to consider for improving existing programs and developing new program initiatives.

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Introduction

The Museum Management Plan (MMP) replaces the Collections Management Plan (CMP) referred to in the National Park Service publications, *Outline for Planning Requirements, DO-28: Cultural Resources Management,* and the *NPS Museum Handbook, Part I.*

The CMP process generally followed an operations evaluation format, concentrating on the technical aspects of museum operations, including a review of accession files, status of cataloging, adherence to guidelines, and culminating in detailed recommendations for corrections and program improvements. As an approach to museum management planning, the MMP evaluates all aspects of museum-related programs within a park, and makes broad recommendations to guide development of park-specific programs that address the park's identified needs.

The MMP recognizes that specific directions for the technical aspects of archival and collections management exist within the *NPS Museum Handbook* series. The MMP does not, therefore, duplicate that type of information. Instead the MMP places museum operations in a holistic context within park operations by focusing on how various collections may be used by park staff to support the goals of this particular park unit. This plan recognizes that there are many different ways in which archives, libraries, and museum collections may be organized, linked, and used within individual parks, so it provides park-specific advice on how this may be accomplished. Where required, technical recommendations not covered in the *NPS Museum Handbook* will appear as appendices.

Prior to the site visit by the Museum Management Planning Team (MMPT), park personnel were surveyed to collect baseline data concerning archival and museum collections, the library, and related services needed by the staff. This information allowed the team to make a

quick evaluation of many issues relating to these operations. The survey also provided insights into ways in which a well designed museum management program might address the needs of the park staff. The results of this survey are contained in Appendix A.

The park staff and MMPT worked together over the course of the team's visit to develop the issue statements contained in this plan. Topics addressed meet the specific needs of Haleakalā National Park (HALE) as discussed during those meetings, and thus do not necessarily represent a complete range of collection management concerns. Most elements of this plan are developmental in nature. The recommendations are intended to guide the park through the process of creating and implementing a workable system that supports all aspects of museum operations, while at the same time providing guidelines for growth.

Members of the MMPT were selected for their ability to address the specific needs and concerns of the park. Primary information gathering and the initial draft was developed over a two week period in June, 2003. Various supporting elements were developed at the same time.

The team wishes to thank the staff of Haleakalā National Park for the courtesy, consideration and cooperation extended during this planning effort, in particular Elizabeth Gordon, Jennifer Talken-Spaulding and Ron Nagata. Their time, effort and involvement have been very much appreciated, and made the team's job much easier. It is apparent that these individuals are dedicated and committed to the preservation of the park resources, and the interpretation of those resources to the public. It is a pleasure to work with such professionals.

History of Collection Management

Halekalā National Park was initially established as a unit of Hawaii National Park on August 1, 1916. Hawaii National Park had three units: the Summit area of Haleakalā on Maui, and Kilauea Volcano and portions of Mauna Loa on the island of Hawai'i. The park was established "as a public park or pleasure ground for the benefit and enjoyment of the people of the United States...and [to] provide for the preservation from injury of all timber, birds, mineral deposits, and natural curiosities or wonders within said park, and their retention in their natural condition as nearly as possible." Archival documents from this era of joint management as Hawaii National Park are held in the archival collection at Hawai'i Volcanoes National Park (HAVO).

On September 13, 1960, Congress authorized the establishment of HALE as a separate unit of the National Park System. This effectively re-designated the units of Hawaii National Park as two new national parks: HALE on Maui and HAVO on Hawai'i. These parks were to be administered in accordance with the National Park Service Organic Act of 1916, which created the National Park Service. Thus, the purpose of HALE is further reflected in a key provision of the Organic Act—"to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

In 1980 the United Nations Education Scientific and Cultural Organization designated HALE as an International Biosphere Reserve. The purpose of the designation was to have HALE serve as a benchmark

site for research and education in order to improve our understanding of the human effect on natural ecosystems, and to develop more effective ways of managing ecological and genetic resources.

Early Collections History

The collections history covering the period from the park's creation to 2000 was gathered from a review of park CRM records, including the Museum Accessions book, Collections Management Reports (CMR), annual inventories, old catalog and accession records, Scope of Collections Statement (SOCS), and other documents associated with museum management. However, the early history of the park's museum collection is not well documented. What follows is a general chronology of museum collections management activities at HALE.

Early SOCS were completed in 1976 and 1985. At that time, the museum collection was to provide park-related resources for reference and exhibits in support of the park's interpretive, resource management, and research programs. Focus was to be on natural history collections in support of the park's interpretative goals and to further knowledge of the HALE environment as used by humans from the early Hawaiian period to the present.

HALE has never had a professional curator on staff. Before 2000, responsibility for the museum collection was delegated as a collateral duty to interpretive staff. Where known, the names of people who seem to have had the most involvement with the collections are included in this history.

1960s

The park's Naturalist/Interpretation Division was made officially responsible for the care of the park's museum property by the early 1960's. The first accession recorded in the park's Museums Accession

Book consists of Hawaiian archeological artifacts presumably collected by a park ranger within the park prior to 1936. These were accessioned and cataloged in 1962 along with several natural history specimens (biology, geology). A series of orientation panels were also erroneously accessioned during this early phase of the museum program; these were later (1980's) de-accessioned. Responsibility for the museum collection shifted among various employees during this time period, including Robert Badaracco, Chief Park Naturalist, and J.W. Larson and Ralph Harris, Park Naturalists. The earliest Annual Inventory of Museum Property on record was completed in 1964.

1970s

During this time, the collections were primarily used to provide background information to park interpreters. Eleven percent of the collection was on exhibit. Items accessioned and cataloged during this period included exhibit panels, paintings, sculpture, and mounted birds to be used in interpretive exhibits.

1980s

In 1984, 64 cellulose nitrate negatives were converted to safety base film-originals and placed in storage at the National Maritime Museum Photo Vault in San Francisco, California. Also in 1984 a team consisting of Diana Pardue, Donald Cumberland, Diane Nicholson, and Mark Tanaka-Sanders visited the park to assist park staff in the preparation of a Collection Management Plan (CMP). Proper collection storage was identified as a significant problem. The plan noted that improvements were needed to care for the collection, including using an insulated storage structure and consolidating collections within a single repository.

A 1986 checklist for museum storage and exhibit spaces identified the following conditions:

- Museum storage area not used exclusively for museum items
- No environmental insulation
- Rusty cabinets
- One standard specimen cabinet used to store cultural and geological material; located in a garage
- None of the herbarium collection in the Resources Management research area accessioned or cataloged
- Accessioning and cataloging deemed up to date, though little work done on museum collection for a number of years; no new additions to the collection

A goal stated in 1986 was to transfer specimens collected within the park to the Bishop Museum in Honolulu and other appropriate institutions. The Bishop Museum, as a major repository for biological collections, was thought to be most readily accessible for collections research and conservation. In 1988 the issues of storage, maintenance and the need for consolidation of the collection at the British Museum were discussed as being in opposition to the needs of researchers for a working reference collection.

Staff working on the museum collection at this time included James E. Boll, Interpretative Specialist; Carol Beadle, Park Ranger-Interpretation; and Adele Favela, Park Ranger-Interpretation.

1990s

In the early 1990s work on the collection was focused on the photo archives. Staff working on the museum collection included Patricia Zuccaro, Park Ranger-Interpretation; Robert Butterfield, Chief of Interpretation; and Linda Moore, Park Ranger-Interpretation. In the mid to late 1990s Ron Nagata Sr., Chief of Resources Management, assumed responsibility for collections management; he signed the first Collection

Management Report in 1997. The Automated National Catalog System (ANCS+) software was purchased in 1999.

2000s to present

On October 1, 2000, Cultural Resources Management (CRM) was established as a program under the park's Resource Management (RM) Division. The CRM program consisted of term employee Elizabeth Gordon, Archeologist, and permanent employee Jennifer Talken-Spaulding, Park Ranger. Museum management duties were collateral duties for both employees. Gordon was permanently hired as the Cultural Resources Program Manager in 2001.

The first task CRM staff completed was a 100% inventory of the museum collection. The inventory identified one painting, seven geology items, and eleven archeology items as missing; these were later (2001) de-accessioned as losses. CRM staff also moved all archeology, history, and geology items stored at various locations throughout the park to the CRM office in the maintenance building. The CRM office now serves as the primary museum collection storage facility. Also in 2000, CRM staff began to update and enter collection records in ANCS+, since only one accession and one catalog record had been previously entered.

Regional Curator Kent Bush visited the park in March, 2001, to advise CRM staff on museum management issues. In June, 2001, Gordon revised the SOCS. In November, 2001, as a result of Gordon's initiative, an estimated 90 archeological items were returned to the park from storage at the Bishop Museum. These artifacts and ecofacts were from Kenneth Emory's and Lloyd Soehren's archeological surveys of HALE in the 1920s and 1960s respectively. Items were accessioned but remain as backlog catalog. Also in 2001, 28 archeology items accessioned in error were removed from the collection and four geology items belonging to HAVO were returned. An orientation for fire and security of the museum

collection was conducted by Talken-Spaulding for park law enforcement staff Karen Newton and Michael Grate.

In February, 2002, CRM staff developed and trained interpretation staff to assist in the implementation of an environmental monitoring program for the museum collection. Self-calibrating digital thermometers / hygrometers were installed at all museum exhibit spaces (Kīpahulu and Park Headquarters Visitor Centers, the superintendent's office) and all museum storage spaces (CRM office, RM office, and the office in the Haleakalā Visitor Center), and the daily recording of temperature and humidity began. CRM staff also began implementing a quarterly/annual program to measure visible light and UV levels, and conduct general inspections of museum exhibit and storage spaces.

In March, 2002, Lynn Mitchell, Western Archeological Conservation Center (WACC) Archivist, conducted a preliminary archival survey for the park. This survey indicated that over 178,000 archival items needed to be accessioned and cataloged into the museum collection.

In January, 2003, CRM staff attended a meeting in Kona, Hawai'i, with other Pacific Islands Cluster CRM staff to discuss issues relating to natural history collections, especially regarding the volume of specimens that maybe collected in association with the NPS Inventory and Monitoring Program. Natural history collections currently make up over 90% of the park's museum collection.

Starting in March, 2003, Amandine Maury, Student Conservation Association (SCA) Resource Assistant, assisted CRM staff with the museum collection. Maury installed the ANCS+ program upgrade and converted all previous ANCS+ records into the new system, accessioned and cataloged primarily cultural items into the museum collection, assisted in drafting the museum collection access policy and procedures

and accompanying forms, and created a computer database to analyze museum environmental monitoring results.

In April, 2003, CRM lost one of its two permanent staff members as well as funding for that position when Talken-Spaulding moved from Maui. Maury temporarily assumed museum technician duties.

Figure 2: ʻĀhinahina (silversword)

Museum Management Philosophy

The basic principles for managing museum collections in national parks are not always well understood. Park managers, resource managers and interpreters are often too busy with their specialties and daily work to fully consider the concepts and logistics governing collections management. It is easy for parks to fall short of developing a sound Museum Management Program and, as a result, not realize the full benefit and value from their collections.

This section provides the following background information about museum collections:

- The purpose of museum collections within national parks
- How collections represent a park's resources
- Determining where to locate park museum collections
- Establishing access, use, and management policies for museum collections

Purpose of Museum Collections within National Parks

Museum collections always contain objects and specimens, and most parks administer their own archives and operate their own libraries. These functions are necessary to support the work of the organization as a whole. It is also not unusual for these resources—archives, collections and libraries—to also be accessible to the public.

Within national parks, museum collections (including archives) serve four basic functions:

- **Documentation of resources.** Park collections should serve as documentation of the physical resources of the park as well as the history of the park's efforts to preserve and protect those resources.

- **Physical preservation and protection of resources.** Park collections should help preserve and protect a park's resources, not only by keeping the specimens and collections made to document the resources, but also by preserving information about the individual items and the resource as a whole. This is central to the management of both natural and cultural material.

- **Research.** During documentation of collections, a park performs research to provide the background information used in cataloging. The park is also responsible for making this collections information available for legitimate research, which can itself lead to new discoveries about an individual item, or the park as a whole.

- **Public programs.** The park is responsible for using its collections to provide information to the public. Exhibits, publications, and interpretative programs are traditional means of supplying public information, but new technology has led to other communication methods, including electronic access through Web sites and online databases.

How Collections Represent a Park's Resources

A park's museum, archival, and library collections provide different perspectives on its resources:

- Museum collections, which contain three-dimensional objects and specimens, should represent the resources within the park boundaries. Examples of museum collections include: artifacts from archeological activities; specimens and resulting reports from resource management projects; and paint samples and building fragments from restoration of historic structures.

- The park archives should contain files, manuscripts, maps, building plans, and photos that document the history of park development and the management of its resources. Individual collections within the archives should further document the activities that created portions of the museum collections. Examples of park archives include: copies

of field journals and maps created while collecting botanical specimens; photographs of historic structure work; maps and as-built drawings made during utility installation; and property, land and water use agreements that document past acquisition and use of park lands.

- The park library should contain both published literature and less formal reports and documents relative to the park's resources and their management. Examples might include: general literature concerning local history, flora, and fauna; specialized scientific studies relative to biota and archeological resources found in the park; circulating copies of all park-specific planning documents; trade, craft and professional journals reflecting the need for park staff to remain current in their field.

Determining where to Locate Park Museum Collections

The *NPS Museum Handbook* should be used as a guide for identifying locations for branch or satellite park collections, and establishing methodologies for their documentation, organization, storage and use.

It is often most effective if collections are located centrally since this promotes efficient use of space (particularly in terms of combining preparation and work areas). However, it may also be efficient operationally to split the collections among potential users (for example, the herbarium and insect collection going to separate branches for storage and use).

Branch or satellite collections are possible as long as proper preservation and security conditions are met, and the requisite work areas necessary for management and use are provided. Overall responsibility for documentation, preservation, and reporting should, however, remain vested in one curatorial lead position, no matter where branch collections are located.

Establishing Access, Use, and Management Policies for Museum Collections

Access, use, and management policies define who can access the collections (both staff and public), what types of use are possible and under what conditions, and how the collections should be managed. Desired outcomes or products should be identified as well; for example, the type of services that are expected from the collections. Some examples might include production of overlays for buried utilities; production of CDs containing research done at the park; liberal access to botanical specimens for comparative studies; and inter-library loan services. Samples of access, use, and management policies may be obtained from the Lead Curator.

The park may wish to consider the use of focus group exercises to develop a number of park-specific documents, including a Role and Function Statement, for the combined collections. These would clearly state who is responsible for the development of a joint resource and how it will function to serve park-wide goals. Access and use policies should be defined and implemented, and responsibilities for development, documentation, and management of the resource should be defined in a formal position description and associated performance standards. These objectives must be fully defined in writing if they are to be accomplished in fact.

Some recommendations to consider for developing and formalizing the park's management philosophy of archives, libraries, and museum collections are as follows:

- Create a focus group of senior staff representing all park administrative units to define what the collections should contain, how they should be managed and accessed most efficiently, and what products should be produced upon request.

- Define the role and function of the combined collections by formal statement, formal access policies, and formal methodologies for depositing collections material, archival information, and required literature into the collections.

- Assign responsibility for developing and managing the joint collections to a single administrative unit and individual by using a written position description and performance standards.
- Identify possible cooperative partnerships in the community with groups that hold common interests regarding the preservation and management of park resources.

Figure 3: Archeology collection storage

Issue A — Planning, Programming, and Staffing

Issue Statement

An aggressive approach to planning and programming is required to define and support a sustainable Museum Management Program.

Background

The museum, archival, and library collections at HALE have the potential for significant growth as the Natural Resource and Cultural Resource Management Programs are developed.

The CMR prepared in 2002 indicates that the park has approximately 4,009 cataloged objects and specimens. Additional resources identified by the Museum Management Plan Team during the June, 2003, visit require museum documentation. These include an archival collection of about 210,000 individual items documenting park resources management and history, an herbarium of about 10,000 individual plant specimens, and an insect collection of about 7,500 individual specimens.

As various projects come to fruition, these quantities of objects and specimens will be significantly increased unless a proactive plan is developed and implemented to ensure no backlog of cataloging is created by projects in the park.

The park has no full-time curatorial staff; curatorial responsibilities are a collateral duty of the CRM program of the RM Division. There is no ONPS funding dedicated to museum collection management. The park receives $3,000.00 per year for its computer-cataloging program. Of that amount $1,400.00 is paid to Rediscovery, a company that supports

ANCS+, for program software updates and technical support. The remainder is spent on cataloging efforts.

The park library resources continue to grow as reference material becomes available. Library resources are required to document, reference, and interpret the material in the park collections. Currently there is no single catalog documenting all library holdings within the park, particularly those books and periodicals purchased and used by park divisions other than Interpretation. There is no shelf list or finding aid for park wide holdings that would facilitate the search and location of titles for use. There is a finding aid for titles in the Park HQ Library.

Neither the CRM nor the Curatorial Program has ONPS budget support other than the GS193/11 (Cultural Resources Program Manager) who is the single CRM employee at the park. The park has not asked its cooperating association, the Hawaii Natural History Association, for any funds for curatorial projects. The park has not sought any grants from other sources for curatorial projects.

Discussion

The effective development of the programs, budget, and staff necessary to preserve resources and complete the park's mission requires an aggressive approach to long-range planning. If the necessary documentation of need followed by the requisite planning and programming of the required work does not occur, disorganization and inefficiency will overwhelm task completion.

As a non-specialist ultimately responsible for all park programs, the superintendent should depend upon the professional and technical advice of the collections manager to make informed decisions regarding park collections. It is the responsibility of the collections manager to provide the necessary documentation, programming, and planning required to make sound fiscal and staff decisions that result in efficient management of the resources. In fulfilling these responsibilities, the collections manager must be very clear in documenting and costing all assigned duties, and must present this information in a timely manner.

The most efficient method to document current and projected activities that would involve curatorial staff is a time/cost analysis. This approach is suggested to establish a point of credibility for the park's Museum Management Program, and to provide the superintendent with a logical basis upon which to decide whether work is performed or placed in backlog. This also provides the superintendent with good information to use in defense of unit requests for staff and funding. Some very basic time/cost analysis questions might include:

- How many accessions have been processed each year for the last three years?
- What is the average time/cost to process an accession?
- Is the rate of new accessions entering the collections increasing or decreasing?
- Are we keeping up with basic registration, or is material going unprocessed?
- What is the average time/cost to catalog an object?
- What is the average time/cost to prepare a specimen for storage?
- What is the average storage cost per cubic foot of storage per year?
- What is the time/cost to provide exhibit case monitoring/cleaning per year?
- How many requests for research access to collections were received per year for the last three years?
- Is the rate of requests for research access increasing or decreasing?
- What is the time/cost to comply with the average research request?

Similar analysis should be done for all assigned duties (primary and collateral) and the results compiled in terms of time and direct costs. Once this information is collected, analyzed, and formatted for presentation, both the employee and the superintendent will be able to recognize the time and direct costs associated with the various facets of

the entire work load, and determine how to balance and accomplish the necessary work. Additionally, this data will document where collateral duty activities may detract from essential work, and where the use of other levels of support would be more cost-effective.

To assist with the development of project statements for the Resource Management Plan (RMP), a computer disk containing draft "generic" or "fill in the blank" statements was sent to the park several years ago to review and adapt for unit-specific needs in the next revision of the RMP. The park is also encouraged to use the search function of the Service Project Management Information Program System (PMIS) program to identify successful projects worded by other units, and adapt these to park use.

The park should seek additional funding sources for curatorial projects to provide needed assistance in cataloging and museum collections management. The park's cooperating association and local foundation offices should be approached with specific project requests tailored to organizational interests.

As an essential part of park operations, the Museum Management Program should have a separate ONPS budget in addition to project funds.

Recommendations

- Develop a list of essential archival, museum, and library management activities, and begin a time/cost documentation and analysis for each activity.
- Share the cost of the necessary journeyman-level staffing required to bring collections, archives, library and exhibits to professional standards among the park divisions or branches using or generating collections or archives.
- Revise the RMP. Remove redundant museum management project statements and those that are no longer valid. Add new project statements to document needs.

- Revise PMIS statements for the park. Add new project statements that accurately define current park needs in archives and museum management.

- Review the park's SOCS to ensure the museum collection is representative of the park's cultural and natural resources.

- Program for and develop a consolidated curatorial storage facility with adequate space for current and future museum collection storage and workspace, library and archival storage, and office space needs. This facility should be located in close proximity to major points of use (in particular RM and Maintenance).

- Establish an ONPS-funded budget for curatorial and museum management activities.

- Continue to seek PMIS funding for archival and museum management programs.

- Formalize an agreement for curatorial assistance required by the Pacific West Region until such time as journeyman-level staff is employed by the park. See Appendix B for a suggested format.

- Develop a protocol to ensure that natural resource management projects meet the provisions of 36 CFR 2.5(g) and that sufficient funding is included in projects to provide for curation of collected specimens and archival documents.

Figure 4: Herbarium collection storage

Issue B — Natural Resource Collections

Issue Statement

The natural science specimens of Haleakalā National Park document the park's biota and landscape, providing for new research and discoveries. An urgent investment is needed to organize, preserve, and protect these resources and to facilitate the growth of new collections.

Background

HALE was established in 1916 as an extended unit of Hawaii National Park, an internationally famous site for its geology and living biota. In 1961 it was re-designated a national park and has seen its visitation increase significantly, reaching almost two million visitors a year. During its 87 years, approaches to HALE's management have evolved along with public and political attitudes, science, and the art and craft of operating National Parks. HALE has always attracted scientific inquiry, and in the last 30 years the park has developed a Resource Management Program with professional scientific and resource management staff. The park now attempts to address a wide variety of resource issues including non-native invasions of plants and animals; declining, threatened, rare, and sensitive species; air and water quality—a long list of intensely complex species, ecosystems, and interrelated disciplines. As a component of these efforts, the creation of databases, maps, documents, and specimens occurs on a regular basis; all can contribute to a long-term museum collection development process.

The park has generated natural resource collections and archives since its earliest days. The overwhelming majority of these are located in universities and museums. The Bishop Museum in Honolulu is perhaps the largest recipient of park materials due to its proximity and emphasis on Hawaiian culture and nature. The identity and location of some past collections are known, but much remains to be discovered.

The collection of plant material at the park is currently scattered and lacks adequate documentation, storage and organization. Specimens are stored in cabinets and boxes in the park resource management offices, the Biological Resource Division (BRD) laboratory of the U.S. Geological Survey, and the stone building in the Maintenance yard.

The HALE Resource Management offices house a full-height herbarium cabinet that contains a few thousand plant specimens, almost all of which are unmounted and stored in newspapers with the collection data written on the newspapers. The specimens are sorted by plant Family and Genus and stored within Genus folders. A small amount of fern material is stored in plastic bags. This collection was started five years ago as an aid to identification, teaching, and documentation. Their data has been entered into a computer spreadsheet created especially for this collection. A box of lichens collected recently by a student volunteer is stored on a high wall-mounted shelf in the office near the herbarium cabinet and contains about one hundred specimens. A report was completed that has photographs of the lichens; the park has three copies. Unfortunately, the author did not link the specimens collected directly to the discussions / photos in the report. Still, the combined collection represents an effort to create a voucher collection for HALE lichens.

The plant specimens in the BRD laboratory date from the 1970s and 80s and appear to be important collections done by research scientists in an effort to document the park's biodiversity. No count was made of these

specimens—perhaps 1,000 is an estimate that could suffice for planning purposes. A small collection of lichens are located in metal filing cabinet drawers along the floor in the lab, numbering perhaps a few hundred specimens.

Herbarium specimens located in the stone building used by maintenance are housed in six rather old and corroded standard half-height herbarium cabinets, one of which is known to be empty. The two that could be opened contained specimens ranging from the 1930s to the 1990s. One cabinet contained about 300 specimens [a sampling included specimens collected by Tachikawa (1937), Otto Deneger (1939), Henrickson (1969), Kjargaard (1976), and Holt and Loope (1982)]. Most are mounted on herbarium sheets but substantial materials are still unmounted and stored loose in newspapers. This cabinet had a sign on it indicating that it was to be sent to the Bishop Museum in 1995.

The second herbarium cabinet in the stone building that could be opened contained samples from C. Chimera (1995), L. Stemmermann (1976), and A.C. Mederios (1984). Most were mounted, many in a very professional manner, and contained about 250 specimens. Assuming that the two cabinets blocked from access were also filled with specimens, about 1,000 specimens would be contained in this collection. The condition of the cabinets is very poor; the environment is that of an open air maintenance bay, full of surplus equipment, dust and dirt prevalent, and very unsuited to preservation of organic specimens.

Of the two insect collections, one set has been collected over seven years by park biologist Raina Takumi Kaholoa'a. Most specimens are stored in a half-height entomology cabinet adjacent to her desk, with a few portable boxes on or in her desk. The collection is very well mounted and documented, with consistently well-labeled and pinned insects numbering some thousands in all. Kaholoa'a made the collection on an

opportunistic basis, collecting in the field where and when she could, with an emphasis on those insect groups most familiar and/or interesting. Some type species —specimens used to first describe a new species or taxonomic variety—are contained in this collection. Such specimens require increased protection, for they are very important and represent a special charge for NPS stewardship.

The other insect collection on site is located in the BRD laboratory in two dozen wooden glass topped insect drawers sitting on a wall mounted shelf. This collection ranges from 1910s to the 1980s. The state of preservation and documentation is highly variable, but the majority appear to be the result of professional scientists. Some species lack any data, and a few groupings of insects share one common label—a risky practice of temporary expediency that can lead to specimens becoming disassociated from their collection data. These drawers are hard bottomed, making removal and insertion of pins difficult and putting great stresses on the specimens. A dense-foam layer attached to the bottom of the drawer will correct this problem. A number of type specimens were found in this collection; a partial listing is given in Table 1. Paratypes are specimens used to first describe a new species, and are among the highest kind of significance for scientific specimens. The term paratype refers to a series of specimens used, not just a single "type" specimen. The park needs to research the existence of other specimens from these paratypes, and ascertain how many others remain, their locations, and how rare these specimens are. In any case, type specimens need to receive the highest level of care.

Table 1. Insect paratypes located in HALE/BRD Laboratory
New species all described by D.E. Hardy

Scientific Name*	Collector	Date
Dorilas halea	Timberlake	1919
Trepana beardskyi	Hardy	1952
Truparea beardesyi	Hardy	1952
Dorilas juuator/melanopolis	Tanashiro	1952
Scaptomyza mytica	Hardy	1953
Drosophila melanoloma	Hardy	1953
D. mediana	Namba	1956
D. mediana	Namba	1959
Astaia	Throckmorton	1964
Lispocephala brennidorsata	Hardy	1966
Procanace acuminata	Hardy	1970
Procanace constricta	Hardy	1970
Tropancea artemisiae	Teves	1977

* Spelling may not be exact, not all names were adequately studied

As part of the Inventory and Monitoring (I&M) program, the park is expected to receive a position within a year to perform "data mining" for the Pacific I&M network. This involves locating published and unpublished information and museum specimens that provide past documentation of the flora, fauna, and environmental conditions in the park.

The link between the museum program and natural resources has been intermittent, mainly because of the lack of museum staff and its assignment as a collateral-duty. Beginning in 2000 with the hiring of a full-time archeologist who serves as the CRM Program Manager, and an additional CRM staff person, efforts have been made to coordinate and organize natural resource collections. Collections have been accessioned

and some data sharing has occurred, but much remains to be done. This issue lays out a five-year program of acquisition, organization, documentation, and preservation of HALE's natural resource collections.

Discussion

Links between the cultural and natural resource programs exist at many levels, and are too numerous to elaborate here. Many elements of both programs appear mutually exclusive, having little to do with one another, such as: archeology and endangered plants, historic photographs and alien goats, or prehistoric structures and water quality. But all resources within a park must ultimately be managed as an integrated system. Decisions cannot be made in isolation, affecting one resource type using one set of values irrespective of other resource types. Natural resource museum collections have an inherent advantage in recognizing this integration. The collections cannot be assigned as solely the purview of natural or cultural programs. We have defined them as the responsibility of both programs. HALE is fortunate to have a unified natural and cultural resource division, making collaboration on the approach to managing natural resource collections a straightforward opportunity.

The CRM program has begun to work with the natural resource collections, accessioning materials and working on obtaining additional site licenses for ANCS+ so that biologists may have direct access. This work needs to continue with accessioning all the collections, working with estimated counts until processing can generate exact numbers of specimens. For the older plant collections, the accessioning unit could be the collector, so that all specimens from a collecting effort would have one accession folder. If any collectors have collected less than 25 specimens, they could be lumped into a "miscellaneous" collector accession. If a wide range of dates were included in such a group, they could be subdivided into 25 year ranges, such as (1925-1949, 1950-1974, etc.). The important step of accessioning allows for their status to be

recognized and reflected in the annual Collections Management Report. When cataloging occurs—and mounting of loose herbarium specimens is considered part of the cataloging process—it is equivalent to placing specimen numbers on archeological artifacts and re-housing in trays and bags. Insect specimens need to be culled of those without data (assuming none are TES or known rarities), and pins and labels stabilized. Programming for these activities needs to be done (see Issue A).

Working with staff and outside researchers on the development of new collections is an ongoing responsibility. Effective data management suggests that collection data be entered only once and then transferred to other electronic data systems as needed. The use of Access or Excel software systems is certainly acceptable, but it is highly desirable that at least some of the data fields be designed to allow easy export to ANCS+. Any such design should be tested before extensive data entry occurs; problems are much easier to solve for a few records rather than a few thousand. For existing data sets, the Rediscovery company that supports ANCS+ may be able to provide technical assistance in conversion.

Perhaps the museum program could develop a list of considerations and standards for staff and scientists in their development of collections. Such a list might describe the preferred preservation methods, labeling, database structure, and accessioning procedures. The intent would be to provide information and support, not a regulatory or controlling approach. For HALE staff, a system of annual accessions might be used to capture each year's production and avoid multiyear backlogs. A rather simple field documentation form could be created to facilitate the process and capture the needed information.

The expertise and experience in working with natural resource collections reside in the natural resource staff who know and work with these specimens. The park should consider recognizing their important

contribution by formally assigning them collateral duty responsibilities. Such duties may be no more than 5% or 10% of the total, but such recognition will assist in workload planning, obtaining funding for projects and training, and allow for them to receive credit for their investment in these park resources.

The biggest challenge facing the management of natural resource collections is their storage conditions, which currently range from marginal to completely unacceptable. Discussion has been underway of rehabilitating and expanding the resource management and maintenance office buildings, but it is uncertain when and if funding would be received. For the purposes of this plan, we anticipate working with existing conditions for the next five years. Making such an assumption, one of the largest, urgent and necessary actions that the museum program can accomplish is to create a safe and secure location for existing collections (also see Issue D on preservation).

Consultations with resource management, maintenance, and all staff that currently inhabit the Maintenance/RM complex could begin at the CRM Program Manager level, exploring possibilities to create a "collections room" that would be accessible to all collection developers and users. The climate within the room could be modified using a small air conditioner and dehumidifier. Security within the room can be provided by lockable cabinets (perhaps only for valuable cultural materials) and an outer door would have key-controlled access. Electronic locks provide an easy method to grant coded access that can be removed once the individual leaves or no longer needs access (no bothering with duplicate keys, lost keys, etc.). One area that appears very suitable would be the BRD area presently containing the lab and office spaces. This space would make an ideal location for the park archives, collections, office, and analytical laboratory unit.

The urgency of creating such a space is clear; specimens are stuffed into offices, laboratories, even maintenance bays. Preservation levels are poor, access is limited and/or sometimes difficult, and workspace is non-existent. Such an improvement would be the most significant advantage to managing these collections that the park can undertake; it is just as important as basic documentation.

The park has relied on outside repositories for much of the expert curatorial services and storage to date, and this has been an effective policy in light of not having onsite staff or space. As the CRM program has developed, however, there now exists the opportunity to have small collections assembled and stored that can serve as the nucleus for even larger, scientifically more significant collections in the future. The 2001 SOCS for HALE states that "The B.P. Bishop Museum in Honolulu has been designated as the primary, but not exclusive, repository for HALE's vascular and non-vascular plant voucher collection." The park needs to regularly communicate with the Bishop Museum on what they are willing to take, and understand their limits and desires in this area. The plant specimens in the stone building may or may not be appropriate to send to the Bishop Museum. They may want all, some, or none of this collection.

The park needs to be prepared to deal with contingencies; for example, the Bishop Museum, like any other museum, could change its loan and repository policies at any time. Sole reliance on the Bishop Museum's ability to support the park's collection, especially without funding support, may not be wise. In any case, the park needs to consult with other NPS experts and curators on ways to analyze what should remain in the park versus what should be relocated to outside repositories.

Again looking outside the park, the CRM program has accumulated some knowledge of collections from HALE in other museums and repositories, and this effort should continue. The I&M program data mining project

offers an opportunity to acquire and share additional information on both data and specimens.

Recommendations

- Accession all existing natural resource collections in the park that meet the SOCS criteria.
- Program funds for the preservation, documentation, and processing of natural resource collections.
- Develop a programmatic approach to accession and track on an annual basis new specimens collected by HALE staff. Be creative and efficient in capturing collection data electronically, making the cataloging of specimens easier.
- Assign biological curation duties to natural resource management staff with knowledgeable skill and interest. Work to have these collateral duties officially incorporated into their Position Descriptions.
- Begin consultations and planning to create suitable storage space to house natural and cultural resource collections, anticipating five years of growth into the capacity of the space. Identify new construction needs and requirements, but plan for the necessity of solving urgent upgrade needs using existing facilities.
- Develop policy defining what should remain in the park and what is best sent to outside institutions.
- Collaborate with the I&M program in data mining and other avenues of exploring existing collections and datasets in outside repositories.

Issue C — Archives and Records Management

Issue Statement

Identifying, organizing and processing archival materials that document park resources and management activities will strengthen research, promote accessibility, and support park operations.

Background

This issue explores the need at HALE for creating access to information in library, archival, and collection materials, while maintaining professional standards for their management. Within units of the National Park Service, these resources provide the framework for unique institutional memory and corporate knowledge. Park libraries contain published materials relating to local resources. Collections of cultural artifacts and natural history specimens provide three-dimensional records and baseline data for understanding and monitoring park resources. Archives reflect details about these collections and represent the corporate body of original or unique documents relating to park management activities.

The Museum, Archives, and Library Collections Survey (Appendix A) completed by 30% of the existing staff at HALE, revealed that the staff use the library more than collections or archives. The primary use of park collections (32%) was for project research. An additional 56% of the staff

responding wanted a listing of what was in the collection and finding aids for the archival collections.

The 2001 CMR reveals that archival cataloging has never been completed at the park. Further, the CMR does not have any archives listed for potential backlog cataloging projects. Approximately 178,000 items were identified during a preliminary archival survey completed in March, 2002, and the CMR needs to be amended to reflect these changes. An estimated 110 linear feet of park records need to be pulled from central files, Resource Management, Maintenance, and the park library for inclusion in the park's archival collection. These materials, including administrative records, associated field records, and resource management records, are represented in numerous material/type formats. The formats include site forms, field notes, drawings, maps, oral histories, artifact inventories, computer tapes and diskettes, manuscripts and reports, and photographic slides, prints, and negatives. These materials are found in various locations throughout the park including Administration, Maintenance, RM, and the park library.

A large gap in park records and early historic documentation relating to HALE may be attributed, in part, to the development and organization of the originally established Hawaii National Park in 1916. This included three units with the headquarters (where park records were kept) on Hawai'i (see page 19, History of Collection Management).

While no archival cataloging has been completed, the small amount of inventorying and accessioning is of greater concern. This is the first level of accountability for archives and museum collections, for when accessioning activities are incomplete, the park loses control of vital records and information. Additionally, the accessioning of park records facilitates funding needs as well as planning needs for the collection manager. A review of park accession records revealed that no preliminary

inventories or indexes exist for the collections. Also, original negatives (including both nitrate and diacetate) were found in an accession folder.

Discussion

While there are park records located throughout the park and in various offices and buildings, the following information describes the largest collections (or groups) of permanent park records that need to be included in the park archives.

Resource Management Building:

Endangered Species Management

Within this program several monitoring projects, including the *nēnē* (Hawaiian goose), *ʻuaʻu* (Hawaiian petrel), and trap lines of alien pests, are ongoing. Miscellaneous records are also associated with these projects, such as U.S. Fish and Wildlife Service permits, field notebooks, photographs, and so forth. Approximately 24 linear feet of materials are associated with the above monitoring projects, and an additional 10 linear feet are devoted exclusively to the ongoing *Nēnē* Survey including raw data and survey notes. The materials date from the 1970s to the present. No completed inventories (file cabinet, drawers, file-level) exist for any of this documentation, and no accessioning has been completed for these resource management records.

Vegetation Management:

Data collection on specific projects in this program, such as data for native vegetation restoration, alien plant removal, general plant information files (where species are located in the park), and monitoring data, such as plant transects, is both completed and ongoing. Twelve linear feet of vegetation management records, four linear feet of data devoted exclusively to transects, and approximately 1,400 color slides are included. No inventories (file cabinets, bookshelves, drawers, or file-

level) for any of this documentation have been completed, and no accessioning has been completed for any of the projects.

Feral Animal Management

This program has data on both completed projects (Judas Goat Study) as well as ongoing monitoring projects for pigs, axis deer, and rabbits. It also includes data on the Fence Project (protecting the park from feral animals) and remote camp records (including daily logs) as well as approximately five linear feet of documentation and 2,000 color slides. Again, no completed inventories exist and no accessioning has been done.

Office, Chief of Resource Management:

This office retains a large quantity of park records that eventually need to be accessioned and incorporated into the park archives. Approximately 22 linear feet of materials are associated with various projects relating to the park, including field notes, reports, aerial photographs, and so on. Two linear feet of National Environmental Policy Act (NEPA) compliance documentation date from the 1980's to 2000, while documentation associated with NPS scientific permits within the park date from 1986 to 2001. A flat file contains an estimated 1,200 items including hand-colored vegetation maps, Hawai'i tax key maps, construction plans, archeological base maps, drawings for the Kīpahulu District and grazing maps. This area should also be inventoried and materials accessioned by project.

Cultural Resource Management Office:

The CRM office serves as the office for the CRM Program Manager and as the museum collection storage area. It contains artifact cabinets, photographic collections (possibly 2,000 items), manuscripts and reports, and motion picture films (about 20). This office also has the computer with the Automated National Catalog System (ANCS+). A review of the database confirmed the lack of accessioning or cataloging of archival

materials. Student Conservation Association Assistants and Americorps volunteers occasionally share this space.

The photograph collection is located in both lateral files and a four drawer photograph cabinet. The collection is a combination of historic images as well as modern views, generally having both a matching print and a negative. A storage upgrade project will be necessary to identify unstable film types, separate color negatives from black and white, and remove prints and negatives from their original glassine enclosures and acidic envelopes.

The historic photographs date from circa 1910; some are not owned by the park. Many early images are owned by the Bishop Museum in Honolulu and the photo index cards often note the negative number (which is a Bishop Museum catalog number). The park does not own the copyright to these photographs and apparently they are not used for anything outside the park. Permission to use the photographs for any purposes other than park research must be granted by the Bishop Museum.

A collection of reel film (approximately 20 reels) is also located in the office area. They are stored in their original metal canisters, but appear to be in stable condition. The park should consider transferring these films to VHS, making them more available for use.

The library has been reviewed several times for manuscripts, project reports, historic images, oral history materials, and so forth. A large percentage of the manuscript materials are unique and only one copy exists. An example is the original, "onion-skin" report prepared by Roger Toll in 1919 with original black and white photographs. The park should consider implementing a duplication policy to better preserve and make this fragile information more accessible.

Administration:

One location currently storing a large quantity of administrative records is called the "dungeon." Located beneath public restrooms of the Park Headquarters Visitor Center, it is the current storage alternative for park records—not the best location in view of the possibility of accidental flooding. Approximately 13 linear feet of important historical records, including land files dating back to 1963, as well as construction files and additional resource management files ('D', 'H', 'L' and 'N') need to be added to the park archives. Large quantities of administrative records need to be destroyed, such as fifteen years of time and attendance sheets and outdated budget information. Boxes of individual personnel files, including performance evaluations, personal information, and applications for hire, need to be properly disposed of according to DO-19 Records Management.

Interviews with administrative staff reveal a lack of understanding about how to implement and maintain an active records management program. Previous records management responsibilities had been assigned to the superintendent's secretary; however, that position has been vacant for an extended period of time. Consequently, very little has been accomplished for the program. All park staff, particularly administration, should receive training in records management to help eliminate further loss of valuable park information.

Recommendations

- Implement a viable records management program at the park, including administrative staff, the park collection manager, resource management, and maintenance personnel.

- Assemble archival materials/collections to be accessioned and cataloged. Examples would include cultural resource studies conducted within the park, completed natural resource projects, and maintenance.

- Submit appropriate funding proposals as Backlog Cataloging, Cultural Cyclic, Cultural Resource Preservation and Protection, and Museum Collection Preservation and Protection Program to address the needs of the collections.

- Process and organize the park's central files to determine and identify permanent resource management records, and those documents that could be transferred to the regional Federal Records Center. A file level inventory should be completed.

- Implement a system for accessioning resource management records and information. This includes both cultural and natural history projects, as well as maintenance activities.

- Expand the partnership with the museum collections program at HAVO to obtain copies of early park records/information that relate to Haleakalā. The superintendent's annual or monthly reports would be a high priority.

- Develop a program to duplicate records (microfilming or scanning) to provide intellectual access to park information.

- Continue to develop and improve storage and research space for archival and museum collections.

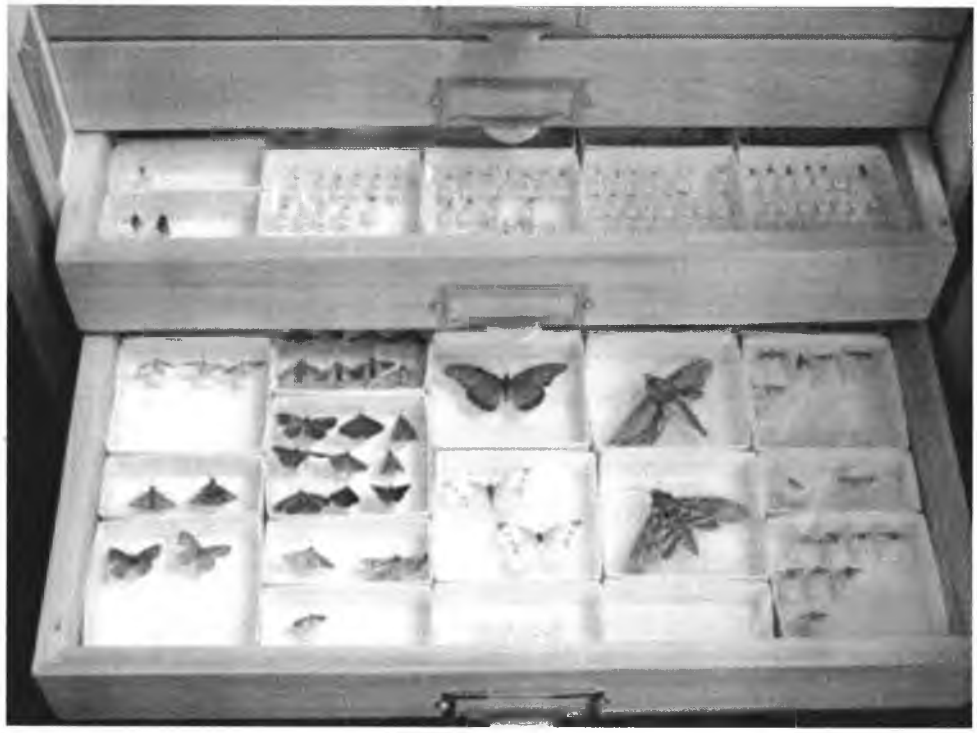

Figure 5: Insect collection

Issue D — Preservation, Access, and Storage

Issue Statement

A strong preventive conservation approach to collections care promotes sound preservation of park collections and archives for research and use.

Background

In 2000 HALE made significant progress in collections care when historical, archeological, and geological collections were consolidated in the newly established 10 ½ x 14 feet CRM office in the maintenance building. Prior to this, these collections had been stored in substandard unprotected conditions in various locations at the park.

However, with the exception of several taxidermic mounts in the CRM office, natural science and archival collections continue to be housed in substandard conditions and locations. Six herbarium cabinets remain in the stone building; the previous park scientist intended to transfer the material to the Bishop Museum for curation. This plan was not followed through and the herbaria continue to be stored in the stone building in conditions adverse to their long-term preservation. Three of the cabinets are actually stored on their sides causing mechanical damage to the physical characteristics of the fragile specimens.

The park is well aware of the need for additional adequate storage and working space for both cultural and natural resource activities. To meet this pressing need, plans were made in 2000 to rehabilitate the existing maintenance building and Cultural Resource Management Building. The plan was the product of consultation with RM program managers who

provided estimates of optimum square footage required for their specific programs. Fee Demo funds were targeted for this project, but park priorities for other projects superseded it, and the project now is in the Line Item Construction funding request process. Adequate space for storage and program activities remains the most crucial need at the park.

Exhibits are minimal at HALE and consist primarily of didactic panel displays with limited use of museum objects in the Park Headquarters Visitor Center and Kīpahulu Visitor Center. Potential locations for future park exhibits that may contain museum objects or information are the Haleakalā Visitor Center, the Kanalulu House and the Kīpahulu Visitor Center.

Discussion

Environmental preservation requirements of HALE collections:

None of the buildings housing museum objects is equipped with climate control beyond basic heating in the high altitude buildings in the summit area.

The majority of archeological and geological material in the collection is virtually climate-insensitive and requires no climate control for long-term preservation. The small collection of historical material contains a small number of metal objects (iron spur, nail and lock plate) that ideally should be stored in dry (below 30% Relative Humidity (RH)) environment for long-term preservation. Monitoring data in the CRM office show conditions ranging from 30 to 40% RH which is acceptable. The objects should be visually monitored for increased corrosion activity to determine if the objects would benefit from storage in a microclimate enclosure conditioned with silica gel as described in the *Conserve O Gram* series of guidance issued by the Washington Area Support Office (WASO) Museum Management Program.

Paper-based material such as archives, photographs, and works of art on paper are considerably more climate sensitive. Optimally, these materials should be stored in cool and dry temperatures for long-term preservation.

Chemical deterioration of paper-based material accelerates as temperature rises. Ideal temperature conditions for exhibiting and storing paper and photographs should be as cool as achievable. This means conditions below human comfort temperature range for long-term storage; in the range of 45-55 degrees Fahrenheit with RH at 30-40%.

The prevailing climate as recorded by the newly established museum environmental monitoring program in the past year shows moderate conditions of RH ranging in the 30% to 40% in the Maintenance/RM complex with infrequent excursions to 20% and 70%. Temperatures are typically in the mid 70's Fahrenheit. Although not ideal, these conditions are within the safety range for *stable* paper-based collections. Most damage to paper and other organic materials is incurred from conditions above the threshold for mold development of 65% RH with elevated temperatures above 75 degrees. The *Museum Handbook* and the *Conserve O Gram* Series provide a detailed discussion of the environmental parameters for paper conservation.

Natural science collections vary in climate-sensibility, but for purposes of long-term preservation with other materials, a fairly stable point between 35 and 60% RH should be acceptable if short-term fluctuations of temperature and relative humidity are not excessive. The specimens are mounted to allow for some movement in terms of expansion and contraction, but the herbaria have already been desiccated in processing and have lost significant ability for hygroscopic reaction to ambient RH.

The most significant threats to herbaria are mold and insect infestation as well as excessive light and high temperatures which promote chemical and molecular deterioration of the mounted specimens. Chitin, the major biological material of insects, is very durable in terms of climate variables, but protein-eating insects are serious problems for long-term preservation. Seed and bryophyte collections are fairly stable and not significantly vulnerable to insect attack.

IPM Issues

Fortunately, the environmental zone of the Maintenance/RM area where the collections are stored is not an attractive habitat to insects such as silverfish (archives and natural history) and dermestid beetles (proteinaceous material) that normally infest organic material. Upon examination during the MMP site visit, there was no sign of insect infestation in any areas of the cultural and natural history collections.

Conditions at Kīpahulu, however, are far more hostile to environmental preservation of collections. Conditions are normally hot and humid in this part of the island. The exhibits at the Kīpahulu Visitor Center have recently been installed and the cases are well designed to permit ventilation and exclude insects; objects displayed are modern ethnographic objects made with traditional techniques.

Exhibits

There are few objects on exhibit that are climate-sensitive. A taxidermic mount of a mongoose is displayed in the Park Headquarters Visitor Center along with a metal sculpture of a silversword; a carved wooden statue of Māui will be in the Haleakalā Visitor Center, and wooden objects and tapa cloth are displayed at the Kīpahulu Visitor Center. Ambient climate in these areas is within the range of tolerance of these organic objects, but light levels are too high for light sensitive natural history specimens and fine finished wood such as the Māui statue. Although some fading may occur, coloration is not a highly significant attribute of these non-historic wooden objects that were commissioned for exhibit.

The mongoose at the Park Headquarters Visitor Center, however, is very damaged by light and should probably be retired from exhibit. Realistically, visitors cannot easily examine and absorb information from the mongoose exhibit in its current placement on top of another exhibit case.

The silversword iron and copper alloy sculpture in this Visitor Center shows signs of surface corrosion, but it may well be that this alteration was present or planned by the artist as an artistic element. If photographs of the sculpture at the time it was acquired are not available, the park should take bench-mark photos now to determine the rate of visual change and deterioration. At the time of the site visit, the condition was fairly stable regardless of light surface corrosion. Dust removal is a good idea, though, because dust can contribute to the corrosion process by absorbing moisture and holding it to the surface of the metal. The sculpture is structurally complex and the most practical way to dust it is to blow dust off with a can of air-duster used on computers. This should be done monthly. If corrosion appears to spread over time, seek advice from a conservator for treatment options.

Conditions at the Park Headquarters Visitor Center are acceptable for exhibiting future non-climate sensitive to moderately sensitive museum collections. This excludes paper-based historic material and historic, scientifically important, natural history light-sensitive material.

The Kīpahulu Visitor Center has been broken into on occasion. Although the museum collection has not been the target for damage and theft, valuable historic museum objects should not be displayed at this location.

Possible future exhibit venues

The recently restored Kanalulu House will be used chiefly for park meetings. Lack of security in this building and only occasional occupancy should dictate furnishing the building with easily replaceable contemporary furniture in a rustic style rather than historic period furnishings. Termites are a huge problem in this area, and although only about 2% of the architectural fabric is original, an IPM program must be established to include monitoring of this building to protect the monetary investment of the costly restoration. No museum material should be exhibited in this building.

Future use of the Kīpahulu Conservation Center (also called the Lindbergh structures) is problematic because of its open construction and

proposed location when moved. No museum collections should be exhibited in this building in the future. If desired, any future exhibits by the park rather than by the Kipahulu 'Ohana (a park partner) should be limited to didactic graphic panels.

Museum Maintenance Programs

In February, 2002, CRM staff developed a well-conceived museum environmental monitoring program for all areas in the park that contain museum collections, including the superintendent's office where original water color and acrylic paintings are hanging.

The plan entails daily recording of readings from Mannix® self-calibrating digital thermo-hygrometers placed in six locations, and quarterly recording of visible and UV light levels.

Information gathered by this effort is indispensable in identifying the environmental characteristics of each location and understanding how exposure to those conditions will affect various climate sensitive materials. However, lack of climate control in any of these areas indicates the conditions are unlikely to change. Establishment of climate profiles through one full year of monitoring in each museum area is sufficient to inform curatorial decisions regarding preservation of specific materials in storage or on exhibit. Beyond that, daily or continuous recording is most useful in tracking the performance of a climate control system, whether mechanical or passive, to evaluate the success of the climate control strategy and any need for adjustments to keep the environment within the tolerance range of collections.

The same is true of light readings. For example, after several quarterly measurements of light levels, the park now has enough information about visible and UV light levels in the superintendent's office to determine that the significantly light-sensitive watercolor paintings by Bruce McGrew should be removed. Ideally, visible light levels for watercolors should not exceed 5 foot-candles or 50 lux, and UV radiation should be well below 75 microwatts per lumen. Unfortunately, light levels in the superintendent's office are as high as 55 foot-candles or 550 lux. The fluorescent light tubes

are covered with UV filtering sleeves which lowers the UV radiation, but the visible light levels are completely unacceptable for long-term preservation.

Monitoring light levels is also not really necessary in areas where collections are enclosed in cabinets such as the CRM office and RM Building. However, UV monitoring can be useful in the Kipahulu Visitor Center where UV filtering material is used on the windows to see if the filtering is still functioning, but quarterly monitoring is probably not necessary.

Present and future storage needs

At this point in the park's growing Resource Management Program, the need for adequate storage and workspace that had been listed as a high priority in the 1989 Collection Management Plan space is more critical than ever, and the park must revisit the design for upgrading facilities.

Table 2: Space needs by square feet identified by RM program managers in 2002

Area	Present Space	Proposed Space
Vegetation management	235	1050
Feral animal management	220	580
Endangered species	380	800
Administration	245	265
Cultural programs	0	260
Lab	0	100
Toilet/lockers	0	160
Mechanical	30	75
SUBTOTAL:	1110	3290
Circulation – 15%	167	494
TOTAL:	1277	3784

The plan also provides 80 square feet for an undetermined function and 920 square feet for BRD, bringing the proposed total for the Resource Management Offices to 4784 square feet.

Essentially, the new area allotted to the CRM program was the CRM office alone that was carved out of a previous maintenance tool room. There was no allotment for storage of cultural, natural science, or archival material and this need must be factored into a revised plan for facilities upgrade.

The 1989 CMP team recommended the purchase and installation of a 10 x 12 foot or 120 square foot insulated prefabricated structure for storage of park collections. This will not be adequate. The 2003 MMP team determined that 600 square feet are needed to adequately store the existing archives and collections, and provide the necessary preparation and work areas associated with collections management activities.

Collection growth must be considered in calculating space needs as well. Natural science, and to a limited degree archeology, are the two areas where collections growth is anticipated. A five-year growth rate of 5% for archeology and 10% for natural science and documentation is adequate. No significant growth is anticipated for historical collections.

Table 3: Optimum space needs for storage

Collections	Current Size	Projected Space Needs
Archeology and geology	1 standard museum cabinet, approx. 3 record boxes	1 standard cabinet, 29" x 32" 1 shelf of standard steel shelving unit, 18" x 36"
History	1 standard museum cabinet, 1 shelf of standard steel shelving unit, large painting of Māui behind shelving unit	1 standard museum cabinet 1 shelf of standard steel shelving unit, 18" x 36" Sectioned painting rack forMāui , watercolors and acrylic paintings in office area
Biology	2 shelves standard museum cabinet (mounted birds), 1 tall herbarium cabinet in RM Office, 5 herbarium cabinets in stone building Entomological collections in BRD Lab and in RM office	3 tall herbarium cabinets, 30" x 20" 2 entomology cabinets, 22" x 23" 3 standard shelving units, 18" x 36"x 6' (5 shelves) for boxed specimens and records.
Archives	Various locations in park (file cabinets, photo files, etc.)	2 standard shelving units, 18" x 36" x 6 3 5-drawer map cabinets, 54" x 42"

TOTALS:

Biology: 40 square feet for storage furniture / 100 square feet for work-stations / 40 square feet for traffic flow ESTIMATE: 180 square feet

Archives: 34 square feet for storage furniture / 50+ square feet for work-stations / 34 square feet for traffic flow ESTIMATE: 118 square feet

Archeology / Geology / History: 26 square feet for storage furniture / 26 square feet for traffic flow / 100 square feet forwork stations (catalog ing) / 100 square feet for curator's office ESTIMATE: 252 square feet

Total estimated space needs for Museum Management Program: 550 square feet.

Interim actions

Within five years, the park should have a plan for a newly designed Resource Management Facility incorporating the spatial needs of all RM programs, and funding from either the Line Item Construction Program or Fee Demo Program should be in place for construction. In the meantime, however, important actions can be taken to alleviate the critical need by reconfiguring the CRM office and space within the RM Building.

At 600 square feet, the BRD lab and office area now occupies nearly one third of the footprint of the Resource Management Building and is substantially underused. One temporary BRD lab technician visits the lab once a month and another temporary technician visits the office four times a year. Some park collections have been placed in the 14 x 14 feet BRD lab to relieve space congestion, establishing a precedent for mixed use of this area.

Recommendations

Interim actions:

- Identify a contiguous space of approximately 600 square feet and designate a Museum Management Program area (collections preparation, preservation, storage and use). The underused BRD section of the RM Building contains the necessary space, plus an existing preparation facility.

- Relocate the six herbarium cabinets from the stone building, the unprocessed items from the BRD lab, and the herbarium cabinet in biology office area to this location to consolidate herbarium collections.

- Work with the BRD staff to clean out and reorganize the existing laboratory. At the time of the MMP site visit, unsafe storage of containers of infrequently used chemicals and haphazard storage of specimens and supplies were evident, making it difficult to use this specialized area in an efficient and safe way.

- Organize material by activity needs and ensure responsible access of research collections and supporting documentation for biologists. Work with the Resource Management staff to make the most efficient use of shared areas.

- Integrate the CRM office space with the Museum Management Program space on a temporary basis until a more permanent solution to total space needs is accomplished.

Five-year goal:

- Within five years, plan for a newly designed Resource Management Facility incorporating all the spatial needs of the RM programs.

- Secure funding from either Line Item Construction Program or Fee Demo Program for construction.

- Guidance for construction, work flow patterns, security, storage layout and related activities is available in the *Museum Handbook* and *Conserve O Gram* series 14/10 and 14/11. Pacific West regional staff are available to work with the park on developing an optimal plan.

Appendix A — Survey Results

This appendix details the results of a survey relating to the archives and collections management program at Haleakalā National Park (HALE). The survey was conducted in advance of the Museum Management Plan Team visit in an effort to identify and quantify staff needs relating to the park archives, museum collections and library.

Survey Objectives

The primary objectives of the survey were to determine the following:

- Percentage of the staff using the park museum collections and library
- Percentage of the staff using non-park information resources
- Primary areas (categories) of information use, and the reasons for use of those specific collections
- Primary reasons staff do not use park information resources, and what may be necessary to promote information resource availability and use
- General impressions on the part of the staff concerning the value and use of park archives and museum collections

In addition, limited demographic information was collected to develop a length of service and experience profile, and to demonstrate equitable response from each park administrative unit.

Survey Methodology

The target universe of the survey was the temporary and permanent staff of HALE. The survey was distributed to 83 staff members under a cover

memorandum from the superintendent in April 2003, requesting that the survey be completed and returned to the Columbia Cascades Support Office by May 23. A total of 25 responses were received, representing a 30% response rate. A response rate of 12% is required for this type of survey to be considered statistically valid, so the HALE response might be considered good, with a high degree of confidence in the results. However, the distribution of the responses is less than ideal, in that almost 50% came from a single work division (Interpretation) and over 75% of the responses came from permanent staff.

Two types of questions were used in the survey to collect different kinds of information:

- Checklist questions designed to determine what types of services the respondents were using and what type of services they need
- Evaluative questions designed to determine the respondents' attitudes toward the collection management programs offered

Respondents were also given two opportunities to add comments, one in the 'services used' section and the other in the 'services needed' section. Write-in responses are generally not used in surveys of this type because they often fail to elicit a statistically valid response, or a response that is quantifiable. This proved to be the case in this particular survey where most of the written responses were anecdotal in nature, and tended to reinforce information already recorded by the respondents in the checklist sections.

Since the response to the survey in general (30%) was more than sufficient to be considered statistically valid, the results will be phrased as representative of the entire universe surveyed. Responses of less than 10% to any specific question are not considered statistically valid, and will generally not be commented upon. Percentages have been rounded up when 0.5% or more, and rounded down when less than 0.5%.

Demographics

Demographic information can assist with understanding motivation and needs of the respondents, in addition to documenting an adequate distribution of response across administrative division and employment status. Information collected from this survey included length of service, distribution by administrative unit, and employment status.

Length of service

	Total	Average
Years of service	243	9.7
Years at HALE	185	7.4
Years in current position	106	4.2
Number of parks served in	66	2.6

Distribution by administrative unit

Administration	2
Interpretation	13
Maintenance	2
Law Enforcement	4
Resource Management	4
Unknown	0

Employment status

Temporary / Seasonal	0
Permanent	25

Survey Summaries

Percentage of use the collections receive by park staff responding:

- 88% used the library an average of 40 times last year.
- 20% used the archives an average of 4 times last year.
- Only one respondent used the museum collections a total of 10 times last year.

- 72% used non-service archival, library or museum collections an average of 10 times last year.

Conclusions

The majority of the staff uses the library and a significant percentage of the staff uses the archives in some aspects of their jobs. The museum collections (other than the archives) are not being used. Other sections of the survey (see below) indicate the reasons for this.

It might be interesting to determine what services are *not* being offered by the park that requires 72% of the staff to use outside sources for needed reference. This could be accomplished by a one-sheet survey to all employees requesting specific information for improving services (title/subject suggestions for books/periodicals, hours of operation, etc.).

Reasons cited for not using the archives/collections:

- 92% said they did not know what is in the collections.
- 68% said they did not know how to find needed material in the collections.
- 44% said they did not know where needed material was located.
- 48% said the collections were not electronically accessible.
- 56% (aggregate) said there was no place to work/study the collections.

Suggestions for increasing usage were as follows:

- 56% — provide a listing of what was in the collections.
- 36% (aggregate) — provide adequate work space.
- 16% — provide remote computer access to the collections.
- 28% — add professional staff for the collections.
- 28% (aggregate) — extend hours/days for accessing collections.

Almost all the reasons cited for not using the collections involve problems of access. Conversely, most of the suggestions for increasing usage involve improving the access to collections and associated information. An

obvious first step is to provide the necessary listings/finding aids to the collections. This is followed by the need to provide adequate space to access and work with the collections, both for preparation and reference, in areas close to points-of-use.

Information from the evaluative part of the survey (Section V) identifies the value that park staff ascribes to the concepts of archival and collections management and preservation in the park. These responses may be used to gauge staff understanding of why the collections are created, what they consist of, and the degree of support that may be expected in the allocations of staff and resources to the improvement of library and museum services. The following information may be inferred from responses to the survey:

The staff views the collections/archives as being important to the preservation of information about the park, as indicated by the response to the statements...

- "Museum collections/archives should be used to document park resources" (88% agree)
- "Park collections/archives are of no use to me in the completion of my job" (76% disagree, 16% uncertain)
- "Park museum collections/archives are primary resources of the park" (60% agree, 36% uncertain)
- "Park museum collections/archives serve as the institutional memory of the park" (80% agree).
- "Park archives should contain copies of all studies and reports done about the park" (80% agree).
- "There is no value in parks maintaining park museum collections or archives" (92% disagree)
- "Park archives, collections and libraries need professional management and care" (84% agree)

A response of 'uncertain' to some of the above statements is unusual, and suggest confusion on the part of the staff as to what exact roles and

functions the collections are filling at this park. Overall, the staff supports expending staff time and funding for the management of park archives, collections, and libraries.

General Conclusions

The park libraries and museum collections receive a much lower than normal incidence of use when compared to that of other parks. Park staff has, however, indicated a need for the resources and information that well defined and administered collections can provide.

As a result, the park should be looking at ways to facilitate use through the production of finding aids, the joint housing of archives, collections, and library resources, providing adequate specimen preparation and work areas at point-of-use, and providing several methods of intellectual access to the park-specific resources.

An informational finding aid should be produced for distribution to the park staff at the earliest opportunity. Some of the specialized features of the ANCS+ program should help with this.

The orderly increase of funding for both collections staff and specialized space is relatively important to the park staff as a whole, and the staff can be expected to support activities perceived as filling their needs for access and information.

The survey format provided the park staff with the opportunity to offer individual impressions of the archives, museum collections, and library program operations in a candid manner, as well as providing a venue for staff suggestions for changes and improvement. The survey results provide park management with firm background data that should be useful in developing specific programs to manage these unique park resources.

Appendix B — General Agreement for Management of Collections

Between
(Insert name of Park A)
and
(Insert name of Park B)

Background

Purpose

The purpose of this General Agreement (GA or 'the Agreement') is to provide necessary and required accountability, storage, and treatment of cultural and scientific collections recovered from (Park B) at the most cost-efficient rate and in the most effective manner.

Authority

The National Park Service is responsible for the systematic identification, testing, recording and preservation of park resources, and the preservation of objects, specimens, and associated data under various federal laws and regulations, including the National Park Service Organic Act of 1916 (16 USC et seq.), Act for the Preservation of American Antiquities (34 STAT. 255), The Historic Sites Act of 1935 (49 STAT. 666), The Museum Act of 1955 (69 STAT. 242), The Archeological Resources Protection Act of 1979, 36-CFR-Part 79, and 36-CFR-2.5. The National Park Service also is responsible for the preservation and storage of recovered data and material under these federal laws as well as Service

Standards (*DO-28, Cultural Resource Management Guidelines*, and the *NPS Museum Handbook*).

The superintendents of "Park A" (hereinafter referred to as AAAA) and "Park B" (hereinafter referred to as BBBB) have signature authority (DO-20, *Agreements Handbook*) to enter into agreements with other park units regarding park resource management.

Statement of Work

Park Collection Planning, Registration & Accountability

AAAA agrees to:

- Designate a AAAA park curator to serve as "curator of record" for the BBBB collections and reflect this workload in at least one critical element in that staff member's performance standards.
- Designate the above staff member as the liaison with the BBBB collection manager for all matters relating to the BBBB collection.
- Supervise all registration services for the BBBB collections.
- Assist the BBBB collections manager in the preparation of the annual Collection Management Report, the Annual Inventory of Museum Property, and the Checklist of Museum Collections Protection & Preservation as required, and submit these reports for review and signature by the BBBB superintendent.
- Assist the BBBB collections manager in the preparation of collections specific planning and funding documents as required for the management of the BBBB collections.

BBBB agrees to:

- Designate a staff member as "collections manager" to generally manage the BBBB collections, and reflect this workload in at least one critical element in that staff member's performance standards.

- Designate the above staff member as the liaison with the AAAA park curator for all matters relating to the management of the BBBB collections.
- Maintain the Accession Book, Accession File, and catalog records for the BBBB collections as advised by the AAAA park curator.
- Cooperate with the AAAA curator in the development and submission of required planning and funding documents.
- Fund transportation of the AAAA curator to BBBB at regular and required intervals, but at least twice per fiscal year, to facilitate the registration of new material and preparation of required planning documents and reports.

General Provisions:

AAAA and BBBB mutually agree to the following:

- All work assignments will be made through and with the approval of the park curator, AAAA.
- All reimbursement charges will be made through and with the approval of the collections manager, BBBB.

Agreement Evaluation

The parties will jointly review the results of this Agreement at the end of each calendar year. The Agreement may be amended at any time by the written mutual consent of the parties. The approved amendments will immediately become part of this Agreement.

Term of the Agreement

The term of this Agreement is five (5) years, commencing upon the date of signature of the final signatory part to the Agreement.

Key Officials

(name of park AAAA)

_____Superintendent

_____Park Curator

(name of park BBBB)

_____Superintendent

_____Park Curator

Reports:

A: Each party is responsible for its respective timekeeping and other required records and reports.

B: The designated AAAA employee will assist BBBB in completing the required and necessary collection management documentation, planning and development.

Required Clauses:

A: No member or delegate to Congress, or residing Commissioner, shall be admitted to any share or part of this agreement, or to any benefit that may arise there from, but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

B: During the performance of this agreement, the participants agree to abide by the terms of Executive Order 11246 on nondiscrimination and will not discriminate against any person because of race, color, sex, sexual orientation or national origin. The participants will take affirmative action to ensure that applicants are employed without regard to race, color, sex, sexual orientation or national origin.

Name and address of park AAAA:

_____

_____

Superintendent _____ Date _____

Name and address of park BBBB:

_____

_____

Superintendent _____Date _____

Figure 6: Sculpture of Māui by Sam Kaai

Appendix C — Archiving Resource Management Field Records – Standard Operating Procedure

The purpose of this SOP is to aid park staff in accomplishing their responsibilities according to *NPS-77 Natural Resources Management Guidelines, DO-28: Cultural Resources Management Guidelines, DM-411: DOI Property Management Regulations, DO-19: Records Management Guidelines, 36 CFR 2.9*, and legislation associated with archiving resource management records.

The history of incorporating archival materials into the park museum collection is documented in the annual park Collection Management Report (and possibly in the SOCS). In addition, the *NPS Museum Handbook Part II*, Appendix D, documents the need for guidelines for the management of archival material. Directions are included for the retention of reports concerning both cultural and natural scientific research conducted within and for the park.

The park's archives include many unique information resources that need professional organization and arrangement to promote their most efficient use.

Park resource management staff generate records on a daily basis that should be considered for inclusion in the park archives. Staff create data sets, photographs, maps, and field notebooks that future generations will need to access to research the history of cultural and natural resource projects at the park.

Park staff are involved in capturing fire monitoring data, plant collections, air quality research, and a host of ethnographic and archeological

research. Preserving the corporate knowledge of each of these individual activities depends ultimately upon the archival process. The organizing thread should be the project itself.

These guidelines are provided so future materials can be processed and included in the collection in a systematic fashion. Staff may also use this procedure for materials already in their possession in preparation for the materials being accessioned or registered by the archivist under the park museum collection accountability system, the National Park Service Automated National Cataloging System (ANCS+). Accessioning is the preliminary step in identifying collections that will later be cataloged and processed into the archives. Eventually, finding aids are created to enable staff and researchers to easily access information in the collection archives.

Staff cooperation in carrying out this SOP will greatly accelerate the rate at which materials are processed. Subject matter specialists involved in the creation of these materials carry the greater knowledge about these collections. The quality of the final product will depend upon the quality of staff involvement in the process of identifying the exact nature of archival materials.

Archiving Resource Management Field Records

Attachments A and B show, respectively, the several steps involved in archival processing of resource management materials and an example of an archival survey. Further details about the archival process are found in *NPS Museum Handbook Part II*, Appendix D. A copy is available for review from the park collections manager. An example of a park archival collection finding aid is also available upon request.

Checklist for Preparing Field Documentation:

1) Obtain an accession number from the park curator at the commencement of all new field projects.

2) Label all materials with the project accession number. Use a soft lead pencil for marking documents or files and a mylar marking pen for mylar enclosures such as slide, print or negative sleeves.

3) Materials must be arranged by material type, such as field notes, reports, maps, correspondence, photographs, etc. Each group of materials should be stored in individual folders or acceptable archival enclosures.

4) Resource management staff is responsible for turning over all project documentation to the archivist upon completion of a project. In the interest of preserving institutional knowledge, leave collections in their original order. Original order means the organization system created by the originator of a document collection. Resist the urge to take important documents from these collections. If you need something for future use, copy it or request that the curator make a copy. After copying, replace the document or photo where you found it. Much information about past projects has been lost because collections have been picked apart. Remember these materials will always be available. That's the whole point behind establishing an archives.

5) When the archival documentation is transferred to the archivist, the form below should be provided. This form includes the project title, principal investigator, date of project, and a history of the project. The name of the individual who obtained the accession number should also be listed. The type and quantity of documentation would be included as well, such as maps (13), field notes (4 notebooks), correspondence (three files), and so on.

Use one copy of the attached **Project Identification Sheet** for each project.

Project Identification Sheet

Accession Number: _____ (Assigned *Only* By Park Archivist)

Your name _____

Project Title_____

Principle Investigator and position at the park during project. Please list staff who might have aided in the project implementation.

_____

_____

Researcher's office location and extension or current address, occupation, and employer or contact number.

_____

_____

_____

Type and quantity of materials in collection(s) (specimens, papers, files, reports, data, maps, photo prints/negatives/slides, computer media - format/software?) Condition. (i.e. infested, torn, broken, good) Attach additional paper if necessary.

_____

_____

Scope of Project:

Is this collection part of an ongoing project to be updated annually? Yes ____ No____

Research goals or project purpose; published or in-house reports to which collection relates _____

_____

Abstract of collection content. Keywords referring to geographical locations, processes, data types, associated projects. Indicate whether specimens were collected. Attach additional paper if necessary.

Attachment A:

Five Phases to Managing Archival Collections

(From "Museum Archives and Manuscript Collections," *NPS Museum Handbook Part II*, Appendix D)

Phase 1

Gain Preliminary Control Over the Park Records

Survey and describe collections; identify official/non-official records; appraise collections and check them against the Scope of Collection Statement (SOCS); accession collections; order supplies.

Phase 2

Preserve the Park Collections

Conduct the Collection Condition Survey; write treatment or reformatting recommendations; contract to conserve or reformat; re-house; prepare storage, work, and reading room spaces.

Phase 3

Arrange and Describe the Park Collections

Arrange collections; create folder lists; edit and index folder lists; update collection-level survey description; produce finding aids; catalog collections into the Automated National Catalog System (ANCS+).

Phase 4

Refine the Archival Processing

Locate resources; prepare processing plan and documentation strategy; develop a guide to collections; publicize collections.

Phase 5

Provide Access to Park Collections

Review restrictions; write access and usage policies; provide reference service.

Attachment B:

Sample Archival and Manuscript Collections Survey Form

(From "Museum Archives and Manuscript Collections," *NPS Museum Handbook Part II*, Appendix D)
US Department of the Interior
National Park Service

COLLECTION TITLE (Creator/Format/Alternate Names/Accession/Catalog #s):
Asa Thomas Papers DRTO-00008

DATES (Inclusive & Bulk): *1850-1925; bulk 1860-69*

PROVENANCE (Creator/Function/Ownership and Usage history/Related collections/Language):
Asa Thomas (1830-1930) an American engineer, inventor, and explorer specializing in hydraulics created this collection as a record of his life, family, and employment history. Captions on some photos are in Spanish. Note: Must locate a biography of Thomas for the Collection-Level Survey Description. Check the Who's Who in Science. This collection was given by Thomas's third wife, Eva Bebbernicht Thomas to their son, Martin Thomas in 1930. Martin Thomas left it to his only daughter Susan Brabb, who gave it to the park in 1976.

PHYSICAL DESCRIPTION (Linear feet/Item count/Processes/Formats/Genres):
45 linear feet of papers including 15 diaries (1850-1925), 63 albums and scrapbooks, 10 lf of correspondence and 2,000 blueprints

SUBJECTS (Personal, Group, Taxonomic, and Place Names/Eras/Activities/Events/Objects/Structures/Genres): *This collection documents the life, family, inventions, instructions, and professional activities of Asa Thomas including engineering projects in the Dry Tortugas, an 1873 world tour, and hydraulic pump inventions*

ARRANGEMENT (Series/Principle of Arrangement/Finding Aid):
Into four series by type of document: correspondence, diaries, albums and scrapbooks, and blueprints

RESTRICTIONS (Check and Describe) Donor____ Privacy/Publicity _____ Copyright___Libel_____ No Release Forms_____ Archeological, Cave, or Well Site_____ Endangered Species Site_____ Sensitive_____ Classified_____ Fragile _____ Health Hazard_____ Other_____ *The donor, A. Thomas's son Marvin, did not donate all copyrights. The papers are unpublished. Some inventions are patented.*

LOCATIONS Building(s), Room(s), Wall(s), Shelf Unit(s), Position(s), Box(es): *B6 R5 W2 S1-3, B1-40*

EVALUATION (Check and Describe Status)
Official Records __ Non-Official Records __
Fits Park SOCS __ Outside SOCS ___
(Rate Collection Value: 1=Low; 3=Average; 6=High):
Informational __ Artifactual __ Associational __ Evidential __ Administrative __
Monetary __

CONDITION (Check and Describe) Excellent_____ Good___ Fair_____ Poor_____ Mold_____ Rodents_____ Insects_____ Nitrate_____ Asbestos_____ Water Damage__ Other _____

OTHER (Please Describe)

Figure 7: ʻOheʻo Gulch

Bibliography

Good museum management planning requires an understanding of the library, archives, and museum collection resources as they currently exist; background on how and why these resources were developed; and information on what is required to preserve the resources and make them available for use. In order to accomplish these goals effectively, planners must first review park-specific documentation such as reports, checklists, and plans; and then make recommendations based upon sound professional theory and techniques that are documented in the professional literature.

This bibliography provides the references used in developing the Haleakalā National Park Museum Management Plan. The first section gives references to park-specific documentation used by the team to understand the current status of the resources. The second section includes a list of recommended readings that will provide park staff with a better understanding of the physical and intellectual nature of these unique resources, and will enable them to apply professionally accepted techniques and standards for preservation and use.

Park Reference List

Scope of Collections Statement, 1985

Collection Management Plan
Diana Pardue, et al, 1989

Long Range Interpretative Plan
Park, Region & HFC Staff, 2003

Strategic Plan 2001 - 2005
Park Staff, 2000

Annual Performance Plan - 2003
Park Staff, 2002

Standard Operating Procedures for the Museum Collection Environmental Monitoring Program at Haleakalā National Park.
Park Staff, 2002

Library Standard Operating Policy
Park Staff, 1993

Scope of Collections Statement
Park Staff, 2001

Superintendent's Annual Report – 2002
Park Staff

General Management Plan/Environmental Impact Statement
National Park Service, 1995

Statement for Management
Park Staff, 1997

Resource Management Plan, Cultural Component with Projects List
Park Staff, 1999

PMIS Project Statement
Park Staff, various dates

Suggested Reading List

The skills and craft necessary to perform adequate curatorial work have expanded exponentially over the past three decades. Fortunately, the literature in the field has also expanded to meet program needs. The current National Park Service publications, *Museum Handbook*, the *Conserve O Gram* series, and *Tools of the Trade,* all provide basic guidelines. They inform the reader how to perform certain tasks such as accessioning and cataloging, but they do not teach the non-museum specialist when and/or why these tasks should be done. The proper application of the methodology presented in these documents requires a degree of intellectual preparation and practical experience that cannot be provided in procedural manuals or a two-week course.

The following references represent some of the best theory and practice in the fields of collections management, exhibits and programs, and archival management available today within the professional community.

The Museum Management Planning Team does not suggest that the park purchase a copy of each suggested reference, but it is possible to acquire copies of these volumes on inter-library loan.

Park managers and supervisors are encouraged to consider familiarity with the recognized literature in the field when evaluating prospective employees or, as an indication of continued professional growth when doing performance evaluations. This familiarity should be a determining factor for employment at the GS 1015/11 level and above. It should also serve as an indication of job interest and commitment to professionalism when overall work standards are evaluated.

Collection Management References

American Association of Museums. *Caring for Collections: Strategies for Conservation, Maintenance and Documentation.* 1984. More than 60 curators, registrars, and conservators contributed information on how to improve environmental conditions, manage inventory, register objects, and augment public use of museum collections.

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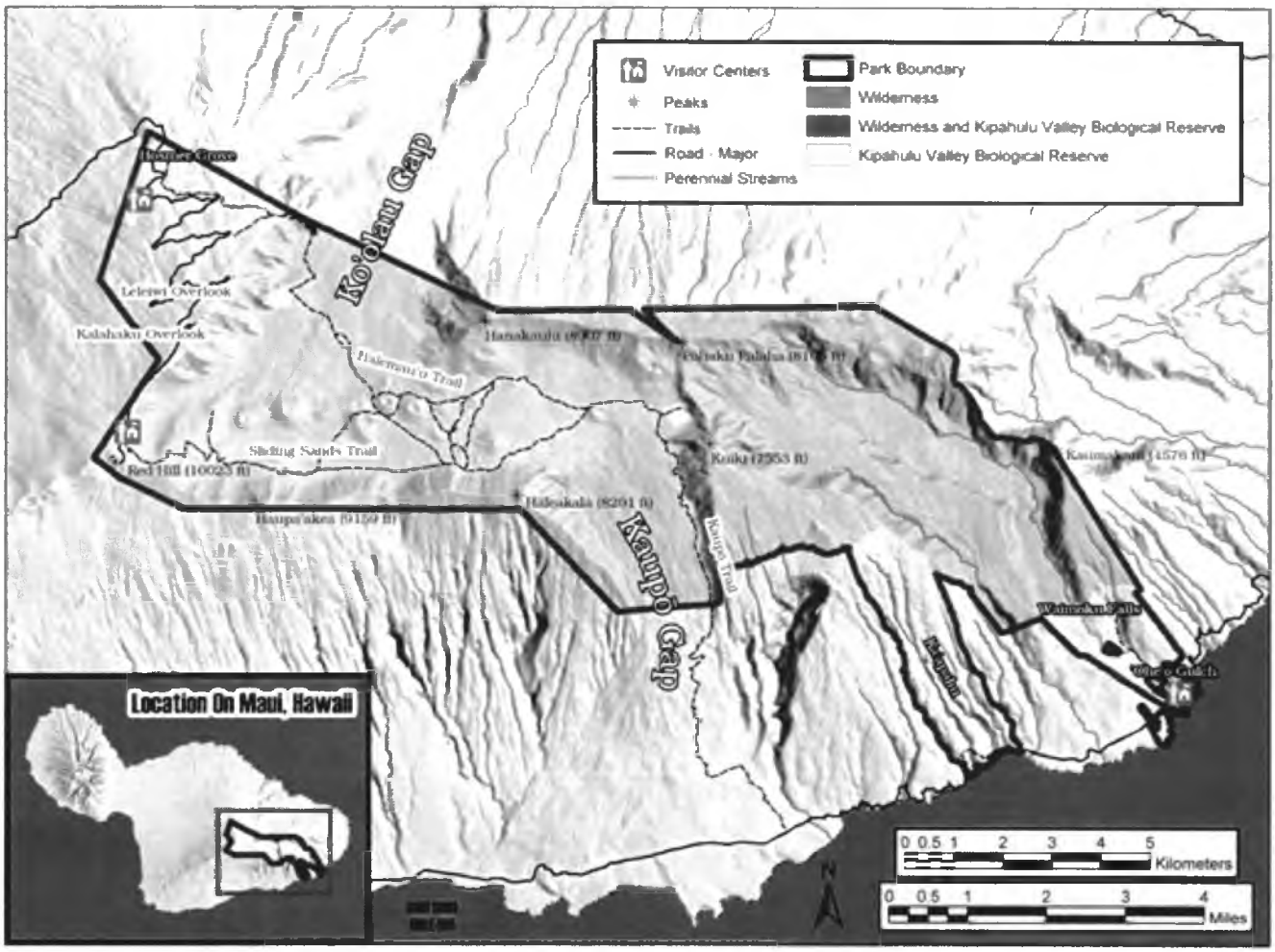
Visitor Centers
Peaks
Trails
Road - Major
Perennial Streams
Park Boundary
Wilderness
Wilderness and Kipahulu Valley Biological Reserve
Kipahulu Valley Biological Reserve
Ko'olau Gap
Kaupō Gap
Leleiwi Overlook
Kalahaku Overlook
Sliding Sands Trail
Red Hill (10023 ft)
Hosmer Grove
Kaupo Trail
Location On Maui, Hawaii
0 0.5 1 2 3 4 5
Kilometers
0 0.5 1 2 3 4
Miles
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